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| 09/782,133      | 02/12/2001  | G. R. Konrad Roeder  | 01P7463US           | 9838             |

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| EXAMINER |
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D AGOSTA, STEPHEN M

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| ART UNIT | PAPER NUMBER |
| 2683     |              |

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |  |   |  |
|------------------------------|--|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/782,133   | <b>Applicant(s)</b><br>ROEDER, G. R. KONRAD |  |
|                              | <b>Examiner</b><br>Stephen M. D'Agosta | <b>Art Unit</b><br>2683                     |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments with respect to claims 1-36 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 4, 7, 10-11, 13, and 16-17** rejected under 35 U.S.C. 103(a) as being unpatentable over Heinmiller et al. WO99-59353 and further in view of Sayers et al. US 6,539,237 (hereafter Heinmiller and Sayers).

As per **claims 1, 7 and 13**, Heinmiller teaches a system for call forwarding comprising:

A telephone subsystem operable to communicate with telephonic devices (figures 2 and 4 show wired/wireless phone systems and phone devices)

A wireless subsystem operable to communicate with a mobile station, the mobile station associated with the telephonic device (figures 2 and 4 show both wired and wireless phone systems that can intercommunicate, figure 4 shows wired phone #410 communicating with wireless phone #420 via tandem switch #440 to MSC/HLR, #470/#480)

**But is silent on** A packet subsystem coupled to the telephone subsystem and the wireless subsystem operable to instruct the telephone subsystem to forward a telephone call directed at the telephonic device to the packet subsystem after the mobile station registers with the wireless subsystem, the packet subsystem also operable to communicate the phone call to the wireless subsystem for delivery to the mobile station.

Heinmiller does show (figures 3 and 5) logic that forwards call to wireless phone if active, otherwise call is forwarded to landline unit AND figure 4 also shows data/packet connection for call/control data between SCP/STP to MSC, page 4, L11 to page 5, line 19).

Sayers teaches a public/private communications system that uses both circuit and packet-switched systems to route calls/data from a mobile phone (abstract, figures

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1-2 and 4 show connectivity, figures 3 and 5 show wired/wireless protocol stacks with both cellular and IP protocols supported and C7, L15-55 and C10, L15-24 teaches mobile connectivity via packet-switched networks).

**With further regard to claim 7**, Heinmiller's logic (figures 3 and 5) will route a second call to a mobile unit when registered (after routing a first call to a wired phone had the mobile been unregistered at the time of the first call).

**With further regard to claim 13**, Heinmiller's logic (figures 3 and 5) inherently teaches a computer processable medium and application program.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Heinmiller, such that a packet subsystem coupled to the telephone subsystem and the wireless subsystem operable to instruct the telephone subsystem to forward a telephone call directed at the telephonic device to the packet subsystem after the mobile station registers with the wireless subsystem, the packet subsystem also operable to communicate the phone call to the wireless subsystem for delivery to the mobile station, to provide means for a mobile user to connect via circuit/packet switched conveyance thus providing increased connectivity choices for their calls/data (ie. PSTN, ISDN, Internet, etc).

As per **claims 4, 10 and 16**, Heinmiller teaches claim 1/7 wherein the packet subsystem is also operable to forward a second/third call directed to the mobile to the telephonic device associated with the mobile station after the mobile deregisters (page 13 claim 1 teaches routing to a wireline phone if the wireless unit is unregistered/unavailable).

As per **claims 11 and 17**, Heinmiller teaches claim 7/13 wherein the mobile comprises a first station and further comprises:

Receiving a third call from a second mobile directed at the first mobile station

Routing the third call through the wireless subsystem and the packet subsystem without routing the third call through the phone subsystem (Heinmiller's logic (figures 3 and 5) will route a third call to a mobile unit when registered).

**Claims 2, 8 and 14** rejected under 35 U.S.C. 103(a) as being unpatentable over Heinmiller/Sayers and further in view of Sienel et al. US 6,426,942.

As per **claims 2, 8 and 14**, Heinmiller teaches claim 1/7/13 **but is silent on** wherein the packet system is operable to instruct the phone subsystem to forward the call by instructing the phone subsystem to invoke at least one of a call forwarding feature, a call monitoring feature, a call deflection feature and remote call forwarding feature.

The examiner notes that the above features are readily available in today's telecommunication systems/hardware. Call forwarding can be invoked either directly or remotely. Call monitoring is provided by hardware administrators operate and Call

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Deflection provides for rerouting a call to an alternate destination if the user is unavailable (such as Voicemail).

Further to this point is **Sienel** who teaches that it is advantageous to periodically or even continuously monitor the data throughput in the Internet during a call by means of the monitoring (C4, L21-31) device AND call forwarding from one network into the other (C5, L9-11).

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that multiple features are invoked, to provide additional capabilities for the call forwarding system.

**Claims 2, 8 and 14** rejected under 35 U.S.C. 103(a) as being unpatentable over Heinmiller/Sayers/Sienel and further in view of Baratz et al. US 5,742,596.

As per **claims 3, 9 and 15**, Heinmiller teaches claim 2/8/14 wherein logic is used to instruct the phone call to be routed to wired/wireless networks via control channel(s) [see figure 4 connections between SCP/STP and MSC which reads on the packet system is operable to instruct the phone subsystem to invoke one or more features using at least one of a signaling channel in a trunk interface, a signaling channel in a line interface, an administration port] **but is silent on** CTI interface, a teleworking server and a telephone emulator coupled to the telephone subsystem.

Baratz teaches server-based control (ie. CTI, teleworking server, figures 1 & 6, #44) and emulation for connections to disparate systems (figure 2, shows voice, email, fax) and for PBX (eg. wired or wireless) support (abstract).

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that server-based processing is used, to provide means for computer-aided call processing.

**Claim 5** rejected under 35 U.S.C. 103(a) as being unpatentable over Heinmiller/Sayers and further in view of Kimball US 5,953,322, Iwama et al. US 6,600,735 and Sienel.

As per **claim 5**, Heinmiller teaches claim 1 **but is silent on** wherein the packet subsystem comprises:

A wireless adjunct internet platform operable to communicate with at least one base station (BTS), and BTS communicates with mobiles

A gateway operable to communicate with the wireless adjunct internet platform and telephone subsystem

A gatekeeper operable to generate signaling messages to control the telephone subsystem.

Kimball teaches a cellular Internet telephone (title, abstract) that supports connections between an Internet call and a mobile station (figure 1).

Iwama teaches an Internet telephone connection supports a a call connection to the PSTN through a gateway device for use in an Internet telephone system having a

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gateway device(ie. a gate keeper, a bandwidth controller, and a router, etc.). (C1, L15-53).

The examiner notes that the above "features" are readily available in today's telecommunication systems/hardware. Call forwarding can be invoked either directly or remotely. Call monitoring is provided by hardware administrators operate and Call Deflection provides for rerouting a call to an alternate destination if the user is unavailable (such as Voicemail). Further to this point is Sienei who teaches that it is advantageous to periodically or even continuously monitor the data throughput in the Internet during a call by means of the monitoring (C4, L21-31) device AND call forwarding from one network into the other (C5, L9-11) while **Plomondon** teaches call forwarding in a remote access call forwarding service (title, abstract)..

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that gateway/gatekeepers and Internet are supported, to provide means for computer processors/gatekeepers are used for connections to the Internet as is known in the art.

**Claims 6, 12 and 18** rejected under 35 U.S.C. 103(a) as being unpatentable over Heinmiller/Sayers and further in view of Iwama et al. US 6,600,735.

As per **claim 6**, Heinmiller teaches claim 1 wherein

The phone subsystem comprises a PBX (the components shown in figure 4 read on a PBX, ie. SSP, SCP, STP and Tandem Switch)

The wireless system supports GSM (page 10, L6)

**But is silent on** the packet subsystem supports the H.323 standard.

Iwama teaches A method of implementing a protocol for servicing a telephone call from Internet to a PSTN is provided in Recommendation **H.323** of ITU-T (International Telecommunication Union-Telecommunication Standardization Sector). In H.323, a gateway device for performing the interconnection processing between a PSTN and the Internet, and a gate keeper for managing/controlling plural gateway devices are used as main constituent elements. The gateway device performs conversion of a call control protocol and audio signals between the PSTN and the Internet. The gate keeper serves to manage the gateway devices in a zone under its control, and mainly performs selection of a connection destination gateway, authorization and admission control of a calling side, and allocation of a telephonic communication bandwidth in response to a call setup request from an IP (Internet Protocol) terminal or a gateway device (C1, L15-53).

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that H.323 is supported, to provide support for H.323 communications.

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As per **claims 12 and 18**, Heinmiller teaches claim 7/13 comprising instructing the phone subsystem to forward the second call to the packet system (figures 4 and 5 show the routing of a call and it's associated logic) **but is silent on** a gateway.

The examiner notes that "gateways" are known in the art of phone communications and provide translation between two disparate networks.

**Iwama** teaches an Internet telephone connection supports a a call connection to the PSTN through a gateway device (figure 1, #102a) for use in an Internet telephone system having a gateway device (ie. a gate keeper #101a, a bandwidth controller, and a router, etc.). (C1, L15-53).

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that a gateway is used, to provide support for communications between disparate networks.

**Claims 19-22, 26-29 and 32-34** rejected under 35 U.S.C. 103(a) as being unpatentable over Heinmiller/Sayers and further in view of Kimball and Iwama.

As per **claims 19-22, 27 and 32**, Heinmiller teaches a system for call forwarding comprising:

A telephone subsystem operable to communicate with telephonic devices (figures 2 and 4 show wired/wireless phone systems and phone devices)

A wireless subsystem operable to communicate with a mobile station, the mobile station associated with the telephonic device (figures 2 and 4 show both wired and wireless phone systems that can intercommunicate, figure 4 shows wired phone #410 communicating with wireless phone #420 via tandem switch #440 to MSC/HLR, #470/#480)

**But is silent on** A packet subsystem coupled to the telephone subsystem and the wireless subsystem operable to instruct the telephone subsystem to forward a telephone call directed at the telephonic device to the packet subsystem after the mobile station registers with the wireless subsystem, the packet subsystem also operable to communicate the phone call to the wireless subsystem for delivery to the mobile station AND Internet, a gateway, gatekeeper for call forwarding, monitoring, deflection features and invoking of features using CTI, trunk/line signaling, admin port, teleworking server or phone emulator.

Heinmiller does show (figures 3 and 5) logic that forwards call to wireless phone if active, otherwise call is forwarded to landline unit AND figure 4 also shows data connection between SCP/STP to MSC, page 4, L11 to page 5, line 19) and instruction to forward a second call to the phone when the mobile deregisters (figures 3 and 5).

Sayers teaches a public/private communications system that uses both circuit and packet-switched systems to route calls/data from a mobile phone (abstract, figures 1-2 and 4 show connectivity, figures 3 and 5 show wired/wireless protocol stacks with both cellular and IP protocols supported and C7, L15-55 and C10, L15-24 teaches mobile connectivity via packet-switched networks).

The examiner notes that "gateways and gatekeepers" are known in the art of phone communications and provide translation between two disparate networks.

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**Iwama** teaches an Internet telephone connection supports a a call connection to the PSTN through a gateway device (figure 1, #102a) for use in an Internet telephone system having a gateway device (ie. a gate keeper #101a, a bandwidth controller, and a router, etc.). (C1, L15-53).

**With further regard to claim 20**, Heinmiller's logic (figures 3 and 5) will support multiple (ie. first, second, third, fourth, etc) calls based on the mobile being registered or deregistered.

**With further regard to claims 21 and 32**, Heinmiller's logic (figures 3 and 5) inherently teaches a computer processable medium and application program.

**With further regard to claims 22 and 27**, Heinmiller is **silent on** a phone client. **Kimball** teaches an Internet call subsystem that reads on a client/server architecture (C5, L58 to C6, L1-7 and figure 3, #22).

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that a packet subsystem is used AND gatekeepers/gateways, Internet and invoking of features is supported, to provide means for a mobile user to connect via circuit/packet switched conveyance thus providing increased connectivity choices for their calls/data (ie. PSTN, ISDN, Internet, etc). and for control of connectivity to the Internet.

As per **claims 25, 28 and 33**, Heinmiller teaches claim 22/27/32 **but is silent on** wherein the client operates in the active state when the mobile is registered and in the non-active state when the mobile is unregistered.

Kimball teaches a cellular Internet telephone (title) that has both Cellular and Internet Call Subsystem (figure 3, #20 and #22) that reads on a client/server architecture (C5, L58 to C6, L1-7). One skilled expects that the mobile phone (with limited battery power) will only activate the client when an Internet phone call is in progress.

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that a client/server architecture is used, to provide means for client/server control as is known in the art (offloads all processing from a central server).

As per **claims 26, 29 and 34**, Heinmiller teaches claim 22/27/32 **but is silent on** wherein the client comprises at least one of a VoIP phone, computing device and a gateway to communicate with another communication system.

Kimball teaches a cellular Internet telephone (title) that reads on VoIP.

The examiner takes Official Notice that combination mobile phones/computing devices" are known in the art (which also reads on a gateway device).

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that the client can be a VoIP phone, computing device or gateway, to provide means for the phone to connect via IP and/or be both a phone and computer.

**Claims 23, 30 and 35** rejected under 35 U.S.C. 103(a) as being unpatentable over Heinmiller/Sayers/Kimball/Iwama in further view of Sienel.



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As per **claims 23, 30 and 35**, Heinmiller teaches claim 22/27/32 **but is silent on** wherein the packet system is operable to instruct the phone subsystem to forward the call by instructing the phone subsystem to invoke at least one of a call forwarding feature, a call monitoring feature, a call deflection feature and remote call forwarding feature.

The examiner notes that the above features are readily available in today's telecommunication systems/hardware. Call forwarding can be invoked either directly or remotely. Call monitoring is provided by hardware administrators operate and Call Deflection provides for rerouting a call to an alternate destination if the user is unavailable (such as Voicemail).

Further to this point is **Sienel** who teaches that it is advantageous to periodically or even continuously monitor the data throughput in the Internet during a call by means of the monitoring (C4, L21-31) device AND call forwarding from one network into the other (C5, L9-11).

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that feature invoking is performed, to provide additional capabilities for the call forwarding system.

**Claims 23, 30 and 35** rejected under 35 U.S.C. 103(a) as being unpatentable over Heinmiller/Sayers/Kimball/Iwama in further view of Baratz.

As per **claims 24, 31 and 36**, Heinmiller teaches claim 23/30/35 wherein logic is used to instruct the phone call to be routed to wired/wireless networks via control channel(s) [see figure 4 connections between SCP/STP and MSC which reads on the packet system is operable to instruct the phone subsystem to invoke one or more features using at least one of a signaling channel in a trunk interface, a signaling channel in a line interface, an administration port] **but is silent on** CTI interface, a teleworking server and a telephone emulator coupled to the telephone subsystem.

Baratz teaches server-based control (ie. CTI, teleworking server, figures 1 & 6, #44) and emulation for connections to disparate systems (figure 2, shows voice, email, fax) and for PBX (eg. wired or wireless) support (abstract).

It would have been obvious to one skilled in the art at the time of the invention to modify Heinmiller, such that server-based processing is used, to provide means for computer-aided call processing.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta  
9-7-04



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